

MINUTES FROM THE EPA SCIENCE ADVISORY BOARD
Environmental Economics Advisory Committee Meeting
August 12, 2002

PURPOSE: The Environmental Economics Advisory Committee (EEAC) of the EPA Science Advisory Board (SAB) met by public telephone conference meeting on August 12, 2002 to complete its review of the Environmental Protection Agency's Affordability Criteria for making decisions on variances from compliance technologies for small drinking water systems. Attachment A is the Federal Register notice announcing the meeting (FR Vol 67, No. 67, No. 135, pages 46506-46507, July 15, 2002; also see FR Vol. 67, No. 81, pages 20765-67, April 26, 2002 which announced the first meeting held in conducting this review.). An agenda is included as Attachment B.

LOCATION: The meeting was coordinated from room 6013, Ariel Rios North Building, US EPA, 1200 Pennsylvania Ave., NW, Washington, DC.

PARTICIPANTS: The following EEAC members participated in this meeting: Drs. Robert Stavins, Dallas Burtraw, Catherine Kling, Lawrence Goulder, Gloria Helfand, Michael Hanemann, Richard Norgaard, Stephen Polasky, and Hilary Sigman. A committee roster is included as Attachment C and a set of biographical sketches is included as Attachment D. EPA Staff and persons from the public who participated in or observed the meeting are indicated on the sign-in sheets (Attachment E).

MEETING SUMMARY: A summary of the Committee's activities follows.

1. CONVENING THE MEETING, LOGISTICS, AND ETHICS CONSIDERATIONS

Dr. Stavins convened the meeting at 1:00 p.m. and welcomed the Agency representatives and the public. He gave a short overview of the agenda and noted that the purpose of the meeting was to reach closure on the responses to the Agency charge questions. Mr. Thomas Miller, Designated Federal Officer (DFO) for the meeting, reminded the members of the ethics considerations that were discussed at the June meeting and their continuing importance.

2. CLOSURE DISCUSSIONS FOR THE DRINKING WATER AFFORDABILITY CRITERIA

a. The Basic Approach: EPA asked the SAB's advice on the basic approach of comparing average compliance costs for a regulation with an expenditure margin, which is derived as the difference between an affordability threshold and an expenditure baseline (Question 1).

Dr. Goulder led the discussion, noting that the affordability issue addresses the higher costs of meeting drinking water standards for many small community water systems. He stated that the approach seems valid, with some qualifications. There are both equity and efficiency cases that can be made for the Agency approach. He discussed three cases to support his statements. Dr. Goulder also noted a significant problem associated with the approach of allowing lower drinking water standards to be implemented in certain systems. That is, doing so could retard the movement toward more efficient consolidation of small systems. He suggested that EPA could consider long range consolidation when it decides on whether variances are to be available for a standard (if the regulations permit). He also noted that use of subsidies to help meet the actual standard might help.

Members discussed the following issues in regard to the basic approach: a) whether there is a “right to safe drinking water” that is relevant to this issue; b) consolidation of small systems; c) technology innovation impediments associated with variances; d) the possibility of case-by-case considerations of affordability for small systems, and e) the need for a periodic study to look at alternatives for small systems.

b. Median household income: EPA (question 2) asked if the basic approach is retained, should a measure other than median income that captures the impact on more disadvantaged households be used as the basis for the affordability threshold? If so, what alternative measures (e.g., 10th or 25th income percentile, poverty level income) should the Agency consider and why? What would be the likely effect of such alternatives on existing and future national level affordable technology determinations?

Dr. Polasky led the discussion of this issue. He suggested that the median was a better measure than mean because of the influence on the mean that can come from existence of wealthy households within a system. Poorer households may find the increases from a standard unaffordable even if the mean household could afford the increase. Setting a value lower than the 50th percentile might be preferable. Progressive water rates might help this problem. He noted that these concerns also exist when one thinks across water systems in a size class not just within a system.

Members discussed the: i) possibility of life-line rates for low income households, ii) the distributional nature of the problem, and iii) the importance of some type of “buffer” for low income households.

c. Affordability threshold (question 3): The Agency asked what alternatives should the Agency consider to 2.5% as the income percentage for the national level affordability threshold and what would be the likely effect of such alternatives on existing and future national level affordable technology determinations? What basis should the Agency use to select from among such alternatives? Should the Agency use costs of other household goods and services or risk reduction activities as a basis for setting the affordability threshold as was done in the development of the current criteria?

Dr. Kling led the discussion. She noted that the purpose of a standard is to reduce morbidity and mortality, and therefore, it would seem that some risk reduction activities other than goods and services might be better comparisons. She suggested that evaluating things such as health system economics and deriving a percentage that is consistent with that metric might be a better approach. Dr. Kling stated that any number selected is a judgment call. She also proposed an “empirical iterative” approach that would use a percentage that would make it easier for the “trigger” to be pulled so decisions could consider the actual characteristics of the system involved. Strong guidelines would be necessary for such evaluations. Periodic evaluations would be necessary to see if a different “trigger” should be used.

d. Expenditure baseline (question 4): *EPA asked if the Committee believes the Agency should consider other approaches to calculating the national expenditure baseline than those used by the Agency heretofore?*

Dr. Hanemann led the brief discussion on this topic. He stated that based on our current understanding of the issue, another approach would be ill advised. He suggested that there is a need to consider the cumulative effect of standards and their influence on triggering the criterion as later standards are considered. An incremental approach to affordability determinations might be considered.

e. Ground water vs. Surface Water Criteria (question 5): *EPA asked if the Committee believes that separate national level affordability criteria should be developed for ground water and surface water systems?*

Dr. Norgaard led the discussion. He stated that there was no reason for separate criteria for ground water vs surface water systems. There is a great difference in what needs to be implemented within the class of surface water systems as well. All do not have the same characteristics or costs.

f. Financial assistance (question 6) *EPA asked if the Agency should include an evaluation of the potential availability of financial assistance (e.g., Drinking Water Revolving Fund) in its national level affordability criteria? If so, how could the potential availability of such financial assistance that reduces household burden be taken into consideration?*

Dr. Helfand led the discussion. She noted that the issue depends on the existence of such financial assistance. Some assistance is available for responding to a variety of water system needs. Assistance is not just tied to the affordability issue alone. Dr. Helfand suggested that if funding is readily available it seems appropriate to take it into consideration when evaluating the situation. If not commonly available to many systems, it should not affect the determination. Determinations should be made based on factors that influence specific systems.

g. Regional vs National Criteria (question 7): *EPA asked if there is a need for making affordable technology determinations on a regional rather than a national basis? Does adequate readily available information exist to support such an approach? EPA is still*

exploring the degree of flexibility afforded by SDWA to make regional determinations, but would appreciate the Committee's advice on whether such determinations are feasible and warranted.

Dr. Sigman led the discussion. She stated that the Committee supports making determinations on a regional or even local basis. Use of regional income measures and regional expenditure baselines would capture the goal of affordability, relative to the resources available in a community, more accurately than the current national value.

3. ACTION ITEMS

Dr. Stavins suggested the following actions and schedule for the committee followup that will develop a report to the Administrator:

- i) Revised responses which capture the discussions of this meeting should be forwarded to the Chair and the DFO by Friday, 8-23-02
- ii) The Chair will compile a draft report and send it to the Committee for review by 9-3-02
- iii) Committee comments will be sent to the Chair by 9-14-02
- iv) An additional draft will be developed and sent to the Committee if needed
- v) The Committee's penultimate draft report will be sent to the EC for review
- vi) The SAB Executive Committee will review the report
- vii) Delivery of final report to the EPA Administrator

3:00 pm ADJOURN

I certify that these minutes are accurate to the best of my knowledge.

<i>/Signed/</i>	<i>/Signed/</i>
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Dr. Robert Stavins	Mr. Thomas Miller
Chair	Designated Federal Officer
Environmental Economics Advisory	Environmental Economics Advisory
Committee	Committee

Attachments

- A FRN 67(135):46506
- B Agenda
- C Roster
- D Biographical Sketches
- E Sign In Sheets
- F Member premeeting comments